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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,412	02/27/2004	Bernd Klotz	KLOTZ-3	5250

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EXAMINER

HUSON, MONICA ANNE

ART UNIT PAPER NUMBER

1732

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/789,412

Applicant(s)

KLOTZ, BERND

Examiner

Monica A. Huson

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 7-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This office action is in response to the Amendment filed 7 August 2006.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeda (U.S. Patent 5,776,407). Regarding Claim 1, Takeda shows that it is known to carry out a method of making a molded plastic article (Abstract), comprising the steps of closing a cavity of a positive mold by applying a clamping force (Column 8, lines 4-6); fully filling the cavity with plastic material, while maintaining a size of the cavity constant (Column 8, lines 21-22); adding plastic material so as to distend the positive mold in opposition to the clamping force until the cavity of the positive mold expands to reach a defined size for producing a defined article thickness (Column 8, lines 22-49); closing the positive mold until reaching a residual distending opening and molding the plastic material into a plastic article while applying the clamping force to thereby maintain the plastic material compressed (Column 9, lines 19-41); and removing the plastic article (Column 10, lines 20-30).

Regarding Claim 2, Takeda shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the adding step is controlled in dependence on a distance traveled by an advancing screw (Column 8, lines 23-25).

Regarding Claim 4, Takeda shows the process as claimed as discussed in the rejection of Claim 1 above, including a method further comprising the steps of measuring an internal pressure in the positive mold, and applying the clamping force in dependence on a profile of the internal pressure (Column 8, lines 21-54).

Regarding Claim 5, Takeda shows the process as claimed as discussed in the rejection of Claim 1 above, including a method further comprising the step of applying a higher clamping force upon the positive mold at a location closer to the sprue than at a location farther away from the sprue (Figures 12 and 13; Column 13, lines 1-3; e.g. compression is greater in the area of the molded article 106-107 than in the area to the left of elements 48-50).

Regarding Claim 6, Takeda shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the molding step is carried out at constant clamping force (Column 9, lines 38-42).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda, in view of Uchiyama et al. (U.S. Patent 6,328,920). Takeda shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show adding more resin depending on the distending motion of the positive mold. Uchiyama et al., hereafter "Uchiyama," show that it is known to carry out a method wherein the adding step is controlled in dependence on a distending motion of the positive mold (Abstract, i.e. the adding step is in

dependence on the amount of movement of the positive mold). Uchiyama and Takeda are combinable because they are concerned with a similar technical field, namely, methods of injection compression molding. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Uchiyama's control theory during Takeda's molding process in order to avoid the need for screw position sensors and monitoring.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda, in view of Machida et al. (U.S. Patent 5,340,528).

Regarding Claim 12, Takeda shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not specifically show forming a thick-walled, flat molded article. Machida et al., hereafter "Machida," show that it is known to carry out a method wherein the plastic article is a thick-walled, flat molded article (Column 1, lines 10-29). Machida and Takeda are combinable because they are concerned with a similar technical field, namely, methods of injection-compression molding. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to form Machida's article using Takeda's molding technology in order to most efficiently produce the desired quantity of the article.

Regarding Claim 13, Takeda shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not specifically show forming a disk. Machida shows that it is known to carry out a method wherein the plastic article is a disk (Column 1, lines 10-29). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to form Machida's disk using Takeda's molding technology in order to most efficiently produce the desired quantity of the article.

### ***Response to Arguments***

Applicant's arguments filed 7 August 2006 have been fully considered but they are not persuasive.

Applicant contends that Takeda does not show the instant invention because he does not show a cavity which expands during the filling phase. This is not persuasive because Takeda's cavity is defined by the movable and fixed molds. Since the movable molds expand during the filling phase, it is maintained that the cavity also expands.

Applicant contends that Takeda does not show the instant invention because he does not show closing the molds to a residual distending opening. This is not persuasive because Takeda clearly discloses a method step wherein the mold halves are closed toward each other and a subsequent step wherein the mold halves are closed further so that they touch (Column 3, lines 15-25). Therefore, it is maintained that Takeda meets this claimed limitation.

Applicant contends that Takeda does not show the instant invention because he shows a process wherein resin is returned from the cavity during the measuring step, a step which is not required by the instant invention. This is not persuasive because the instant claim does not exclude such an extra step.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

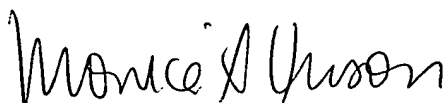
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH

shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Monica A Huson

October 16, 2006



CHRISTINA JOHNSON  
PRIMARY EXAMINER

10/16/06